Before the Federal Communications Commission Washington, D.C. 20554

In the Matter of Amendment of Part 90 of the Commission's Rules to Improve Access to Private Land Mobile Radio Spectrum) WP Docket No. 16-261
Land Mobile Communications Council)
Petition for Rulemaking Regarding Interim)
Eligibility for 800 MHz Expansion Band and)
Guard Band Frequencies	
) RM-11719
Petition for Rulemaking Regarding Conditional)
Licensing Authority Above 470 MHz)
)
) RM-11722
)
NOTICE OF PROPOSED RULEMAKING	

Adopted: August 17, 2016 Released: August 18, 2016

Comment Date: [60 days after date of Publication in the Federal Register] **Reply Comment Date:** [90 days after date of Publication in the Federal Register]

By the Commission:

I. INTRODUCTION AND BACKGROUND

1. In this *Notice of Proposed Rulemaking (NPRM)*, we propose to amend Part 90 of the Commission's Rules to expand access to private land mobile radio (PLMR) spectrum. Specifically, we grant in part petitions for rulemaking filed by the Land Mobile Communications Council (LMCC) proposing to amend our Rules to allow 806-824/851-869 MHz (800 MHz) band incumbent licensees in a market a six-month period in which to apply for Expansion Band and Guard Band frequencies before the frequencies are made available to applicants for new systems; and to amend Section 90.159 of our Rules to extend conditional licensing authority to applicants for site-based licenses in the 800 MHz and 896-901/935-940 MHz (900 MHz) bands. In addition, on our own motion but suggested by recent waiver requests, we propose to amend Section 90.35 of our Rules to make available for PLMR use frequencies that are on the band edge between the Industrial/Business (I/B) Pool and either General Mobile Radio Service (GMRS) or Broadcast Auxiliary Service (BAS) spectrum, to make certain frequencies that are designated for central station alarm operations available for other PLMR uses, and to

³ Petition for Rulemaking of the Land Mobile Communications Council, RM-11722 (filed May 15, 2014) (LMCC Conditional Authority Petition).

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¹ Petition for Rulemaking of the Land Mobile Communications Council, RM-11719 (filed Mar. 27, 2014) (LMCC EB/GB Petition).

² 47 C.F.R. § 90.159.

⁴ See notes 13, 15, 36, and 63, infra.

⁵ 47 C.F.R. § 90.35.

make certain updates and corrections; and to amend Sections 90.219(d)(3) and 90.261(f) of our Rules⁶ to accommodate certain railroad operations.

2. Traditionally, the PLMR services have provided for the private, internal communications needs of public safety entities, state and local government entities, large and small businesses, transportation providers, the medical community, and other diverse users of two-way radio systems.⁷ PLMR licensees generally do not provide for-profit communications services.⁸ The Commission is committed to bringing about more efficient use of PLMR frequencies in order to alleviate congestion in this crowded spectrum,⁹ the demand for which continues to grow.¹⁰

II. DISCUSSION

A. Section 90.35 – Industrial/Business Pool

3. Section 90.35 lists the frequencies that are available for assignment to I/B Pool stations, and sets forth eligibility requirements and frequency-specific use limitations.

1. Section 90.35(b)(3)

- 4. *Background*. Spectrum in the 450-470 MHz band is designated for use by various services, including Part 74 BAS, Part 90 PLMR, and Part 95 GMRS.¹¹ The I/B Pool frequency table in Section 90.35(b)(3) of the Commission's Rules sets forth the assignable frequencies in those segments of the band that are available to I/B eligibles. Frequencies at or near the band edges between Part 90 spectrum and Part 74 or 95 spectrum were not designated for use by any of these services because they could not be utilized without overlapping spectrum designated for the other service.
- 5. When these frequency designations were adopted, PLMR stations operated in wideband (25 kilohertz) mode. Since the beginning of 2013, however, the Commission has required narrowbanding (maximum 12.5 kilohertz bandwidth or equivalent efficiency) by PLMR licensees in the 150-174 MHz and 421-470 MHz bands.¹² With the implementation of narrowbanding and the availability of very-narrowband 4-kilohertz equipment, some frequencies near the band edges now can be used without overlapping spectrum designated for other services. In 2014, the Mobility Division (Division) of the Wireless Telecommunications Bureau (WTB) granted waivers to permit PLMR licensees to operate with a 4-kilohertz emission designator on frequency pairs 451/456.00625 MHz and

⁶ 47 C.F.R. §§ 90.219(d)(3), 90.261(f).

⁷ 1998 Biennial Regulatory Review – 47 C.F.R. Part 90 – Private Land Mobile Radio Services, *Report and Order and Further Notice of Proposed Rule Making*, WT Docket No. 98-182, 15 FCC Rcd 16673, 16674 ¶ 3 (2000).

⁸ Amendment of Part 90 of the Commission's Rules, *Fifth Report and Order*, WT Docket No. 07-100, 28 FCC Rcd 5924, 5924 n.4 (2013).

⁹ See Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, Order, WT Docket No. 99-87, 25 FCC Rcd 8861, 8863 ¶ 7 (2010).

¹⁰ Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, *Fourth Memorandum Opinion and Order*, WT Docket No. 99-87, 23 FCC Rcd 8042, 8044 ¶ 8 (2008).

¹¹ See 47 C.F.R. § 2.106.

¹² See Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, Second Report and Order and Second Further Notice of Proposed Rulemaking, WT Docket No. 99-87, 18 FCC Rcd 3034 (2003); Implementation of Sections 309(j) and 337 of the Communications Act of 1934 as Amended, Third Memorandum Opinion and Order, Third Further Notice of Proposed Rule Making and Order, WT Docket No. 99-87, 19 FCC Rcd 25045 (2004) (Narrowbanding Third MO&O); see also 47 C.F.R. §§ 90.203(j), 90.209(b).

451/456.0125 MHz,¹³ which are between BAS spectrum and PLMR spectrum but not designated for use on a primary basis by any service;¹⁴ and on frequency pairs 462/467.5375 MHz and 462/467.7375 MHz,¹⁵ which are between PLMR spectrum and GMRS spectrum but not designated for use by any service.¹⁶ The Division concluded that waivers were appropriate because very-narrowband PLMR stations can operate on these frequencies without overlapping BAS or GMRS channels, so the public interest would be served by facilitating access to spectrum in congested areas.¹⁷

- 6. Discussion. Frequencies between BAS spectrum and PLMR spectrum. We propose to amend the I/B Pool frequency table to add frequency pairs 451/456.00625 MHz and 451/456.0125 MHz, with the limitation that the authorized bandwidth not exceed 6 kilohertz (the widest bandwidth that will avoid overlap between the frequency pairs). We tentatively conclude that it would be in the public interest to make additional frequencies available to PLMR applicants that can be utilized without overlapping the occupied bandwidth of currently assignable frequencies and without causing harmful interference. We seek comment on this proposal. We note that frequency pairs 451/456.00625 MHz and 451/456.0125 MHz are lower-adjacent to a set of frequency pairs for which the concurrence of the Power Coordinator is required if the proposed interference contour overlaps an existing service contour. We therefore also seek comment on whether to require such concurrence for either of these frequency pairs. We ask commenters to address whether any operational restrictions should be imposed to preclude interference to other users, such as limits on antenna height or power. We also seek comment from operators that have received waivers and any operators with adjacent frequency assignments in the same geographic area about whether they have experienced any interference issues, and if so, how and if they have been resolved.
- 7. The Division also granted waivers to permit operation on frequency pair 451/456.009375 MHz with an 8-kilohertz emission designator in locations where no applicant had requested frequency pairs 451/456.00625 MHz and 451/456.0125 MHz.¹⁹ The purpose of our proposed rule change is to permit the most efficient use of scarce spectrum. We therefore believe that this purpose is better served by adding two 6-kilohertz channels in an area than one 8-kilohertz channel, in order to accommodate more users and encourage the deployment of more efficient equipment. Therefore, we tentatively conclude that we should not add frequency pair 451/456.009375 MHz to the I/B Pool frequency table, though stations authorized on the channel pursuant to waiver would be grandfathered. We seek comment on this tentative conclusion, and on whether any other interstitial frequencies should be added to the table.

¹³ See Mobile Relay Associates, Order, WT Docket No. 14-34, 29 FCC Rcd 7292 (WTB MD 2014) (BAS Waiver).

¹⁴ See 47 C.F.R. §§ 74.802(a) (designating 450.000-451.000 MHz and 455.000-456.000 MHz for BAS), 90.35(b)(3) (designating assignable 451/456 MHz I/B Pool frequencies beginning with 451/456.01875 MHz). Medical Micropower Networks operate on a secondary basis in the 451-457 MHz band. See 47 C.F.R. §§ 2.106 note US64, 95.628(b).

¹⁵ See Mobile Relay Associates, Order, WT Docket No. 13-212, 29 FCC Rcd 660 (WTB MD 2014) (GMRS Waiver).

¹⁶ See 47 C.F.R. §§ 90.35(b)(3) (designating assignable 462/467 MHz frequencies from 462/467.000 MHz to 462/467.53125 MHz and from 462/467.750 MHz to 462/467.94375 MHz), 95.621(a) (designating frequencies 462/467.5500 MHz and 462/467.7250 MHz for GMRS).

¹⁷ See BAS Waiver, 29 FCC Rcd at 7294 ¶ 7; GMRS Waiver, 29 FCC Rcd at 661 ¶ 6.

¹⁸ See 47 C.F.R. § 90.35(b)(2).

¹⁹ See BAS Waiver, 29 FCC Rcd at 7294 ¶ 7. Operation on frequency pair 451/456.009375 MHz with an 8-kilohertz emission designator does not overlap any currently assignable frequencies on either side.

- 8. In the same *Order*, the Division denied requests for waivers to operate on frequency pair 451/456.0000 with a 4-kilohertz emission designator.²⁰ It noted that the proposed operations would overlap the 450-451 MHz and 455-456 MHz bands, in which BAS low power auxiliary stations are authorized to operate.²¹ The Division concluded that assigning channels for PLMR operations that overlap designated BAS spectrum would not serve the public interest. We seek comment on whether I/B use of frequency pair 451/456.0000 would in fact cause harmful interference to BAS operations. In particular, commenters should address whether BAS low power auxiliary stations operate over the entire 450-451 MHz and 455-456 MHz bands, and whether PLMR operations that overlap two kilohertz of these one megahertz bands would cause harmful interference to BAS operations.
- 9. We seek comment on the costs and benefits of each of the above-described proposals or possible rule changes regarding the expansion of PLMR spectrum use to frequencies located between BAS spectrum and PLMR spectrum.
- 10. Frequencies between PLMR spectrum and GMRS spectrum. Finally, we propose to amend the I/B Pool frequency table to add frequency pairs 462/467.5375 MHz and 462/467.7375 MHz, with the limitation that the authorized bandwidth not exceed 4 kilohertz (the widest bandwidth that will avoid overlapping GMRS frequencies²²). When the Division granted a waiver to permit operation on frequency pair 462/467.7375 MHz, it noted that adjacent frequency pair 462/467.750 MHz is exempt from narrowbanding and still may be assigned with a channel bandwidth of 25 kilohertz, which would be overlapped by 4-kilohertz operation on frequency pair 462/467.7375 MHz.²³ The Division nevertheless granted the waiver because there was no incumbent licensee on frequency pair 462/467.750 MHz in any of the particular areas where a waiver was requested that had an occupied bandwidth greater than 20 kilohertz, so there was no overlap of occupied bandwidth with the proposed 4-kilohertz emission.²⁴ We seek comment on our proposal including its costs and benefits and on whether we should instead refrain from adding frequency pair 462/467.7375 MHz in order to preserve the availability of adjacent

²¹ See 47 C.F.R. § 74.802(a). They are authorized to use the entire bands, so long as the emission bandwidth falls entirely within the bands. See 47 C.F.R. § 74.861(c). Devices authorized as low power auxiliary stations are intended to transmit over distances of approximately one hundred meters for uses such as wireless microphones, cue and control communications, and synchronization of TV camera signals. 47 C.F.R. § 74.801. The maximum transmitter power in the 450-451 MHz and 455-456 MHz bands is one watt. 47 C.F.R. § 74.861(d)(1). In addition to the low power auxiliary station licensees reflected in our licensing database, low power auxiliary stations may be operated on a short-term basis under the authority conveyed by a Part 73 or BAS license without prior authorization, subject to certain conditions. See 47 C.F.R. § 74.24.

²⁰ See id. at 7294 \P 6.

²² GMRS frequencies 462.5500 MHz, 462.7250 MHz, 467.5500 MHz, and 467.7250 MHz have an authorized bandwidth of twenty kilohertz. *See* 47 C.F.R. §§ 95.631(a), 95.633(a). The Commission has proposed to migrate GMRS to narrowband technology. *See* Review of the Commission's Part 95 Personal Radio Service Rules, *Notice of Proposed Rule Making and Memorandum Opinion and Order on Reconsideration*, WT Docket No. 10-119, 25 FCC Rcd 7651, 7665 ¶ 37 (2010). We nonetheless conclude that it would be premature to permit PLMR operation on frequency pairs 462/467.5375 MHz and 462/467.7375 MHz with an authorized bandwidth exceeding four kilohertz prior to a determination of what the GMRS narrowbanding timetable would be.

²³ See GMRS Waiver, 29 FCC Rcd at 661 ¶ 7 (citing 47 C.F.R. § 90.35(c)(29)). The Commission exempted frequency pair 462/467.750 MHz and other paging-only frequencies from narrowbanding because paging frequencies are not congested and the Commission was concerned that requiring a systemic overhaul of paging transmitters would harm the paging industry's ability to provide service. See Narrowbanding Third MO&O, 19 FCC Rcd at 25059-60 ¶ 33.

²⁴ See GMRS Waiver, 29 FCC Rcd at 661-62 ¶ 7.

frequency pair 462/467.750 MHz for wideband operations, but grandfather stations authorized on the channel pursuant to waiver. Commenters are asked to discuss whether wideband use of frequency pair 462/467.750 MHz is common, and whether we should expect any growth of wideband operations on the channel.

2. Section 90.35(c)(63)

- 11. Background. The alarm industry uses a number of methods to maintain communications paths used to monitor alarm systems at customer premises from central station alarm monitoring centers.²⁵ Certain frequencies are designated for the use of persons rendering a central station commercial protection service.²⁶ Specifically, four 12.5-kilohertz frequency pairs²⁷ and the upperadjacent 6.25-kilohertz interstitial frequency pairs²⁸ are designated for central station protection service use nationwide (nationwide frequencies),²⁹ and six 12.5-kilohertz frequency pairs³⁰ and the upperadjacent 6.25-kilohertz interstitial frequency pairs³¹ are set aside for central station protection service in the 88 urbanized areas with a population over 200,000 in the 1960 Census (urban frequencies).³²
- 12. A recent review of the Commission's Universal Licensing System suggests that these frequencies are currently underutilized. In particular, 39 of the urbanized areas where the additional frequencies are set aside for central station protection service have no central station protection service licensees,³³ and no more than half of the frequencies are assigned in any of the other 49 areas.³⁴ The need

²⁵ See Sunset of the Cellular Radiotelephone Service Analog Service Requirement and Related Matters, *Memorandum Opinion and Order*, RM No. 11355, 22 FCC Rcd 11243, 11247 ¶ 7 (2007).

²⁶ A central station commercial protection service is defined as "an electrical protection and supervisory service rendered to the public from and by a central station accepted and certified by one or more of the recognized rating agencies, or the Underwriters Laboratories (UL), or the Factory Mutual System." *See* 47 C.F.R. § 90.35(c)(63).

²⁷ 460/465.975 MHz, 460/465.9875 MHz, 461/466.000 MHz, and 461/466.0125 MHz.

²⁸ 460/465.98125 MHz, 460/465.99375 MHz, 461/466.00625 MHz, and 461/466.01875 MHz.

²⁹ See 47 C.F.R. § 90.35(c)(66).

 $^{^{30}}$ 460/465.900 MHz, 460/465.9125 MHz, 460/465.925 MHz, 460/465.9375 MHz, 460/465.950 MHz, and 460/465.9625 MHz.

 $^{^{31}}$ 460/465.90625 MHz, 460/465.91875 MHz, 460/465.93125 MHz, 460/465.94375 MHz, 460/465.95625 MHz, and 460/465.96875 MHz.

³² See 47 C.F.R. § 90.35(c)(63). Away from the urbanized areas, most of these frequencies are available for low-power use. See 47 C.F.R. § 90.267(f).

³³ Akron, OH; Albuquerque, NM; Baltimore, MD; Canton, OH; Chicago, IL/IN; Cleveland, OH; Columbus, OH; Dallas, TX; Des Moines, IA; El Paso, TX; Ft. Lauderdale – Hollywood, FL; Ft. Worth, TX; Harrisburg, PA; Honolulu, HI; Houston, TX; Indianapolis, IN; Jacksonville, FL; Memphis, TN; Miami, FL; Oklahoma City, OK; Omaha, NE; Orlando, FL; Pittsburgh, PA; Salt Lake City, UT; San Antonio, TX; Scranton, PA; Seattle, WA; Spokane, WA; Springfield, MA; St. Louis, MO/IL; St. Petersburg, FL; Syracuse, NY; Tacoma, WA; Tampa, FL; Tulsa, OK; Washington, DC; Wichita, KS; Wilkes-Barre, PA; and Youngstown – Warren, OH/PA.

³⁴ Albany – Troy – Schenectady, NY; Allentown – Bethlehem, PA; Atlanta, GA; Birmingham, AL; Boston, MA; Bridgeport, CT; Buffalo, NY; Charlotte, NC; Chattanooga, TN; Cincinnati, OH/KY; Davenport – Rock Island – Moline, IA/IL; Dayton, OH; Denver, CO; Detroit, MI; Flint, MI; Fresno, CA; Grand Rapids, MI; Hartford, CT; Kansas City MO/KS; Los Angeles, CA; Louisville, KY; Milwaukee, WI; Minneapolis – St. Paul, MN; Mobile, AL; Nashville, TN; New Haven, CT; New Orleans, LA; New York, NY/NJ; Newport News – Hampton, VA; Norfolk – Portsmouth, VA; Oakland, CA; Philadelphia, PA/NJ; Phoenix, AZ; Portland, OR; Providence – Pawtucket, RI/MA; Richmond, VA; Rochester, NY; Sacramento, CA; San Bernardino, CA; San Francisco, CA; San Jose, CA; (continued....)

of central stations for these frequencies appears to have diminished since this spectrum was set aside for their use over 40 years ago,³⁵ which may be attributable to advancements in services and technologies that can be used to complete the communications path between the location of the alarm and the alarm services' central office, such as cellular telephone, satellite communication services, and the Internet. In recent years, entities that do not provide central station commercial protection service have expressed interest in utilizing these frequencies for other purposes.³⁶

- 13. *Discussion*. As an initial matter, we propose to modify Section 95.35(c)(63) to remove the use limitation in the urbanized areas where the urban frequencies are not in use. We tentatively conclude that it would be in the public interest to make these frequencies available for other PLMR operations in those areas. We seek comment on this proposal, including its costs and benefits.
- 14. In addition, we seek comment on other ways to expand PLMR users' access to frequencies that are designated, but no longer needed, for central station commercial protection services, including by making available channels in urbanized areas where some of the urban frequencies are in use. Commenters should address related costs and benefits associated with such proposals. Commenters also should address the current and expected future need for central station commercial protection service channels in the 460-470 MHz band. For example, in the areas where some frequencies are in use, how many urban frequencies should continue to be set aside? Are the nationwide frequencies sufficient to meet demand, without any urban frequencies? Can central station commercial protection service and other PLMR operations coexist? Commenters advocating eliminating the use restriction on any frequency in any area where it currently is in use should discuss how to protect incumbent central station commercial protection service operations from harmful interference.

3. Editorial Corrections and Updates

15. We also take this opportunity to propose to correct certain errors in Section 90.35. Specifically, we propose to restore to the list of airports at or near which certain frequencies are reserved for commercial air transportation services³⁷ two airports (Kahului and Ke-Ahole) that inadvertently were deleted, and correct the coordinates for one airport that were listed incorrectly (Boeing/King County International), the last time the list was updated.³⁸ We also seek comment on whether any airports should be added to or removed from the list, which has not been updated since 2002. In addition, we propose to correct the entries in the I/B Pool table for frequencies from 153.0425 MHz to 153.4025 MHz for which the notation indicating that the concurrence of the Petroleum Coordinator is required was inadvertently deleted when certain narrowbanding rules were adopted.³⁹ We seek comment on these proposals.

(Continued from previous page) —
Shreveport, LA; South Bend, IN; Springfield, MA; Toledo, OH; Trenton, NJ/PA; Tucson, AZ; Wilmington, DE; and
Worcester, MA.

³⁵ See Amendment of Parts 89, 91, 93, and 95 (Formerly 10, 11, 16, and 19) of the Commission's Rules to Reduce the Separation Between the Assignable Frequencies in the 450-470 Mc/s Band, Second Report and Order, Docket No. 13847, 11 F.C.C. 2d 648, 653 ¶ 14 (1968).

³⁶ See, e.g., Wireless Telecommunications Bureau Seeks Comment on Emergency Radio Service, Inc. Request for Waiver to Operate on Frequencies Designated for Central Station Commercial Protection Service, *Public Notice*, WT Docket No. 14-182, 29 FCC Rcd 12694 (WTB MD 2014).

³⁷ 47 C.F.R. § 90.35(c)(61)(iv).

³⁸ See 1998 Biennial Regulatory Review – 47 C.F.R. Part 90 – Private Land Mobile Radio Services, *Memorandum Opinion and Order and Second Report and Order*, WT Docket No. 98-182, 17 FCC Rcd 9830, 9853 ¶ 49 (2002).

³⁹ See Narrowbanding Third MO&O, 19 FCC Rcd at 25090-91.

B. Section 90.159 – Temporary and conditional permits

- 16. *Background*. Pursuant to Section 90.159(b), most applicants proposing to operate a new PLMR station, or to modify an existing PLMR station, on frequencies below 470 MHz that require frequency coordination are permitted to operate the proposed station during the pendency of the application for a period of up to 180 days, beginning 10 days after the application is submitted to the Commission.⁴⁰ This conditional authority is not available for applicants in the PLMR frequency bands above 470 MHz, where spectrum is available on an exclusive basis. When the Commission enacted the rule granting conditional authority below 470 MHz, it stated that it was being conservative by implementing conditional authority only in shared bands, and could consider expanding the concept in the future if experience demonstrated that such action is appropriate.⁴¹
- 17. LMCC argues in its Conditional Authority Petition that expansion of conditional authority to 470-512 MHz (T-Band), 42 800 MHz, and 900 MHz PLMR frequencies is now appropriate. It asserts that, over time, frequency assignments below 470 MHz have become more technically complex, whereas the rules governing the 800 and 900 MHz bands have become less technically complex. Thus, "in the opinion of LMCC, the rules governing frequency assignments in the bands below 470 MHz no longer provide a justification for distinguishing between below- and above-470 MHz for purposes of authorizing conditional licensing." It also states that recent experience with conditional licensing authority in the PLMR bands above 470 MHz pursuant to a temporary waiver supports the proposed rule change. 45

⁴⁰ See 47 C.F.R. § 90.159(b), (b)(6). This conditional authority applies only to applications that meet the following requirements: the proposed station location is south of Line A and west of Line C; the proposed antenna structure has previously been determined by the Federal Aviation Administration to pose no hazard to aviation safety, or the proposed structure height does not exceed 6.1 meters above ground level or above an existing man-made structure; grant of the application does not require a waiver of the Commission's rules; the proposed facility will not have a significant environmental effect; and the proposed station is not in a quiet zone. 47 C.F.R. § 90.159(b)(1)-(5). Conditional authority also is available for applicants proposing to operate an itinerant station or seeking the assignment or transfer of a license for an existing station below 470 MHz. 47 C.F.R. § 90.159(c).

⁴¹ See Amendment of Part 90 of the Commission's Rules to Implement a Conditional Authorization Procedure for Proposed Private Land Mobile Radio Service Stations, *Report and Order*, PR Docket No. 88-567, 4 FCC Rcd 8280, 8283 ¶ 25 (1989).

⁴² A "freeze" on the acceptance of certain T-Band applications is currently in effect. *See* Wireless Telecommunications Bureau and Public Safety and Homeland Security Bureau Suspend the Acceptance and Processing of Certain Part 22 and 90 Applications for 470-512 MHz (T-Band) Spectrum, *Public Notice*, 27 FCC Rcd 4218 (WTB/PSHSB 2012); Wireless Telecommunications Bureau and Public Safety and Homeland Security Bureau Clarify Suspension of the Acceptance and Processing of Certain Part 22 and 90 Applications for 470-512 MHz (T-Band) Spectrum, *Public Notice*, 27 FCC Rcd 6087 (WTB/PSHSB 2012). The freeze was imposed in order to maintain a stable spectral landscape while the Commission determines how to implement provisions of the Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, 126 Stat. 156 (2012) (Spectrum Act), regarding T-Band spectrum. The instant *NPRM* does not propose to lift, modify, or otherwise affect the freeze.

⁴³ *Compare* 47 C.F.R. § 90.187 (requiring an analysis of service and interference contours to determine whether a proposed station below 512 MHz may operate in centralized trunked mode, *i.e.*, without monitoring for other users) *with* 47 C.F.R. § 90.621 (using mileage separation from co-channel incumbents to determine whether to permit a new exclusive-use 800/900 MHz station).

⁴⁴ See LMCC Conditional Authority Petition at 5-6.

⁴⁵ See id. at 6. Specifically, in order to provide relief to I/B Pool applicants from unusually long processing times resulting from applications related to the January 1, 2013 narrowbanding deadline, the Division granted a temporary waiver of Section 90.159 to permit applicants for new or modified I/B Pool stations in the T-Band and 800/900 MHz (continued....)

- applications filed with WTB and the Public Safety and Homeland Security Bureau (the Bureaus) for facilities above 470 MHz. 46 We tentatively conclude that LMCC and the commenters are correct in asserting that expanding conditional authority will enable more applicants to meet pressing communications requirements without needing to seek special temporary authority, and will provide greater flexibility and earlier deployment of spectrum without compromising quality of service. Accordingly, we propose to amend Section 90.159 to expand conditional authority to 800 MHz and 900 MHz I/B and Public Safety Pool frequencies, as well as Section 1.931 of our Rules 47 to provide an appropriate cross-reference to such a rule amendment. We request comment on this tentative conclusion and our proposal, including its costs and benefits. In light of the Spectrum Act and the current T-Band freeze, we do not at this time propose to extend conditional licensing to T-Band frequencies.
- 19. While LMCC proposes to extend conditional authority to T-Band, 800 MHz, and 900 MHz I/B Pool and Public Safety Pool frequencies, 48 neither it nor any commenter discusses whether conditional authority should apply to applicants for 769-775/799-805 MHz (700 MHz) Public Safety narrowband frequencies. 49 We therefore seek comment on whether conditional authority should be expanded to the 700 MHz Public Safety narrowband spectrum, and what the associated costs and benefits of such an approach would be.
- 20. We also seek comment on how conditional licensing could affect public safety licensees operating in these bands and ask commenters to address, without limitation, the specific issues identified below, as well as information on related costs and benefits. Should applicants be required to obtain Regional Planning Committee concurrence for proposed facilities in the 800 MHz National Public Safety Planning Advisory Committee (NPSPAC) band and in the 700 MHz band prior to conditional licensing? Does the mission-critical nature of public safety communications argue against allowing conditional licensing of public safety facilities that potentially would interfere with existing public safety communications systems?

⁴⁶ On June 23, 2014, the Bureaus sought comment on the LMCC Conditional Authority Petition. *See* Wireless Telecommunications Bureau and Public Safety and Homeland Security Bureau Seek Comment on Land Mobile Communications Council Petition for Rulemaking Regarding Conditional Licensing Authority Above 470 MHz, and Deny Request for Extension of Temporary Waiver, *Public Notice*, RM-11722, 29 FCC Rcd 7529 (WTB/PSHSB 2014). Supporting comments or reply comments were filed by the Association of Public-Safety Communications Officials-International, Inc. (APCO); Blooston, Mordkofsky, Dickens, Duffy & Prendergast, LLP; Enterprise Wireless Alliance (EWA); Motorola Solutions, Inc.; National Association of Manufacturers and MRFAC, Inc. (MRFAC); and the Utilities Telecom Council (UTC).

⁴⁷ 47 C.F.R. § 1.931.

⁴⁸ See LMCC Conditional Authority Petition at 1.

⁴⁹ APCO states generally that "Public Safety channels above 470 MHz should be subject to conditional licensing authority," but does not mention the 700 MHz band. *See* APCO Comments, RM-11722, at 1-2.

⁵⁰ See MRA Reply Comments, RM-11722, at 1 (MRA Reply Comments).

in the conditional licensing system.⁵¹ MRA, however, acknowledges that conditional authority functions properly "[i]n the vast majority of cases."⁵² While MRA observes that Part 22 conditional authority has similar limitations to those it proposes, ⁵³ we note that Part 22 applications, unlike Part 90 applications eligible for conditional authority, do not require frequency coordination prior to being filed with the Commission. To the extent that Part 90 conditional authority functions properly without the limitations suggested by MRA, we do not believe that the possibility of discrete incidents of interference warrants imposing those limitations upon all applicants.

- 22. MRA also argues that a conditionally authorized applicant should be required to discontinue operation upon the filing of a petition to deny or informal objection supported by a declaration under penalty of perjury.⁵⁴ We note that Section 90.159(d) provides that conditional authorization does not prejudice any action the Commission may take on the subject application.⁵⁵ Thus, the Commission has discretion to modify or cancel such conditional authority at any time without a right to a hearing; and the applicant assumes all risks associated with operation under conditional authority, the termination or modification of conditional authority, or the subsequent dismissal or denial of its application.⁵⁶
- 23. Nonetheless, we seek comment on MRA's proposal that all Part 90 conditional licensing be granted on a secondary basis and limited to applications that are unopposed, and that a conditionally authorized applicant must discontinue operation upon the filing of a petition to deny or informal objection supported by a declaration under penalty of perjury. Commenters should discuss whether, regardless of whether any new limitations on conditional authority are imposed, Section 90.159(d) should be amended to better address MRA's concerns, and the costs and benefits of such action. For example, we seek comment on MRA's request that the Commission amend the rule to reiterate that conditional licensing is only for six months and that if the application remains pending at the end of six months, the pending applicant must then discontinue operation and await the processing of its application.⁵⁷
 - C. Section 90.219 Use of signal boosters & Section 90.261 Assignment and use of the frequencies in the band 450-470 MHz for fixed operations
- 24. *Background.* Fixed use of frequencies in the 450-470 MHz band generally is permitted on a secondary basis to land mobile operations, but Section 90.261(f) excludes certain frequencies in order to reserve them for other specialized uses. ⁵⁸ Among the excluded frequencies are railroad frequencies at 452/457.925 MHz to 452/457.96875 MHz. ⁵⁹
- 25. A signal booster is a device at a fixed location that automatically receives, amplifies, and retransmits on a one-way or two-way basis the signals received from base, fixed, mobile, and portable

⁵¹ See id. at 2-5.

⁵² *Id.* at 5.

⁵³ See id. at 6 (citing 47 C.F.R. § 22.143(d)(2)).

⁵⁴ *See id.* at 5.

⁵⁵ See 47 C.F.R. § 90.159(d).

⁵⁶ See id.

⁵⁷ See MRA Reply Comments at 6-7.

⁵⁸ See 47 C.F.R. § 90.261(f); see also Amendment of Part 90 Concerning Secondary Fixed Operations in the 450-470 MHz Band, *Notice of Proposed Rule Making*, PR Docket No. 91-66, 6 FCC Rcd 1800, 1802 n.22 (1991).

⁵⁹ See 47 C.F.R. § 90.35(b)(3).

stations, with no change in frequency or authorized bandwidth.⁶⁰ In order to reduce the potential for interference to other users, Section 90.219(f)(3) limits the radiated power of each retransmitted channel to five watts effective radiated power (ERP).⁶¹

- 26. In 2014, the Division granted in part a request of the Association of American Railroads (AAR) for waiver of Sections 90.219(d)(3) and 90.261(f) concerning use of signal boosters to maintain communications between the front and rear of trains. Specifically, the Division permitted use of fixed location trackside signal boosters with up to 30 watts ERP on frequencies 452/457.90625 to 452/457.9625 MHz in areas where coverage is unsatisfactory due to distance or intervening terrain barriers. The Division concluded that the purpose of the fixed use restriction in the subject rules would not be served by applying them strictly to trackside signal boosters, because the rules operate to protect railroad operations, and grant of the waiver would further support railroad operations. In order to address concerns about interference to non-railroad frequencies, the Division excluded the channel pairs at the edge of frequencies coordinated by AAR (452/457.9000 MHz and 452/457.96875 MHz), and required the use of single-channel Class A signal boosters.
- 27. Discussion. We propose to amend Sections 90.219(d)(3) and 90.261(f) to codify the terms of the waiver. We propose to authorize railroad licensees to use single-channel Class A signal boosters with up to 30 watts ERP on frequencies 452/457.90625 to 452/457.9625 MHz in areas where communications between the front and rear of trains is unsatisfactory due to distance or intervening terrain barriers. We seek comment on this proposal. We also ask commenters to address whether we should permit such operations on the outermost railroad channels (452/457.9000 MHz and 452/457.96875 MHz) and whether it is necessary to require the use of single-channel Class A signal boosters. We also seek comment on the costs and benefits of these proposals.
 - D. Subpart S Regulations Governing Licensing and Use of Frequencies in the 806-824, 851-869, 896-901, and 935-940 MHz Bands
- 28. *Background*. As part of the rebanding of the 800 MHz band to resolve interference between commercial and public safety systems, the Commission created the Expansion (815-816/860-861 MHz) and Guard (816-817/861-862 MHz) Bands in order to provide spectral separation between commercial licensees operating Enhanced Specialized Mobile Radio systems above 817/862 MHz and public safety licensees operating below 815/860 MHz.⁶⁶ Expansion Band (EB) spectrum is designated

⁶¹ See 47 C.F.R. § 90.219(d)(3); see also Amendment of Parts 1, 2, 22, 24, 27, 90 and 95 of the Commission's Rules to Improve Wireless Coverage Through the Use of Signal Boosters, *Report and Order*, WT Docket No. 10-4, 28 FCC Rcd 1663, 1718 ¶ 153 (2013).

⁶⁰ 47 C.F.R. § 90.7.

⁶² See Association of American Railroads, Order, WT Docket No. 14-98, 29 FCC Rcd 13439 (WTB MD 2014).

⁶³ *Id.* at 13440 \P 6.

⁶⁴ *Id.* at 13440-41 \P 6.

⁶⁵ *Id.* at 13442 ¶ 7. Class A signal boosters amplify only the discrete frequency or frequencies intended to be retransmitted, while Class B signal boosters amplify all signals within the signal booster's passband. 47 C.F.R. §§ 90.7, 90.219(a).

⁶⁶ See Improving Public Safety Communications in the 800 MHz Band, Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order, and Order, WT Docket No. 02-55, 19 FCC Rcd 14969, 15053-55 ¶¶ 154-58 (2004) (800 MHz Report and Order). No Guard Band exists in the southeastern portion of the United States in counties served by both Sprint Corporation and SouthernLINC and in areas adjacent to the U.S.-Canada border. Furthermore, the Expansion Band consists of the 812.5-813.5 MHz/857.5-858.5 MHz segment of the band in these (continued....)

mostly for Specialized Mobile Radio (SMR) stations, with the remainder for Business/Industrial/Land Transportation (B/ILT) Pool eligibles.⁶⁷ EB users also include Public Safety licensees that chose not to relocate out of the band.⁶⁸ Guard Band (GB) spectrum is in the General Pool,⁶⁹ and thus is available for Public Safety, B/ILT, and SMR operations.⁷⁰ EB/GB channels become available for licensing when the Bureaus announce that the required level of clearing has been achieved in that NPSPAC region.⁷¹

- 29. The LMCC EB/GB Petition proposes that the Commission modify its rules to provide a 6-month window for incumbent 800 MHz licensees in a market to acquire EB/GB channels to expand existing systems before accepting applications from new entrants. LMCC states that expansion spectrum for incumbent 800 MHz systems in urban areas is urgently needed but sparsely available.⁷² It argues that a limited opportunity for expansion of incumbent systems would serve the public interest because those licensees had to undergo the disruptive rebanding process without deriving any economic benefit, and use of the EB/GB frequencies to expand the capacity of existing systems would promote spectral efficiency.⁷³
- 30. *Discussion*. Commenters are split regarding this LMCC proposal.⁷⁴ PLMR frequency coordinators support it. They argue that affording incumbents temporary exclusivity will allow them to address existing needs that have been growing during the rebanding process.⁷⁵ They also argue that such priority will encourage existing licensees to upgrade to more efficient systems because the cost will be

⁶⁷ See 47 C.F.R. § 90.617(b), (d).

⁶⁸ See 800 MHz Report and Order, 19 FCC Rcd at 15053 n.417. They are permitted to expand geographically on the EB channels they retained, and may obtain new EB channels through inter-category sharing. See Public Safety and Homeland Security Bureau Clarifies the Rights of 800 MHz Public Safety Licensees Electing to Remain in the 800 MHz Expansion Band, Public Notice, 22 FCC Rcd 6803, 6803-04 (PSHSB 2007); Public Safety and Homeland Security Bureau Clarifies the Process for Accepting Applications from Public Safety Licensees that Elected to Remain in the 800 MHz Expansion Band, Public Notice, WT Docket No. 02-55, 30 FCC Rcd 3021 (PSHSB 2015).

⁶⁹ See 47 C.F.R. § 90.615.

⁷⁰ See Creation of Interstitial 12.5 KHz Channels in the 800 MHz Band Between 809/817/854-862 MHz, *Notice of Proposed Rulemaking*, WP Docket No. 15-32, 29 FCC Rcd 2476, 30 FCC Rcd 1663, 1675 n.95 (2015).

⁷¹ See Improving Public Safety Communications in the 800 MHz Band, Order, WT Docket No. 02-55, 23 FCC Rcd 15966, 15972-73 ¶ 17 (2008). To date, EB/GB channels have been made available for licensing in 20, generally less populated, NPSPAC regions. See Public Safety and Homeland Security Bureau and Wireless Telecommunications Bureau Announce the Completion of 800 MHz Band Reconfiguration in Certain NPSPAC Regions, Public Notice, WT Docket No. 02-55, 27 FCC Rcd 14775, 14780 (PSHSB/WTB 2012); Public Safety and Homeland Security Bureau and Wireless Telecommunications Bureau Announce the Completion of 800 MHz Band Reconfiguration in Certain NPSPAC Regions and the Availability of Additional Sprint Vacated Channels, Public Notice, WT Docket No. 02-55, 29 FCC Rcd 16290 (PSHSB/WTB 2014).

⁷² See LMCC EB/GB Petition at 3-4.

⁷³ See id. at 5-6.

⁷⁴ On April 24, 2014, the Bureaus sought comment on the LMCC EB/GB Petition. *See* Wireless Telecommunications Bureau and Public Safety and Homeland Security Bureau Seek Comment on Petition for Rulemaking Filed by Land Mobile Communications Council Regarding Interim Eligibility for 800 MHz Expansion and Guard Band Frequencies, *Public Notice*, RM-11719, 29 FCC Rcd 4093 (WTB/PSHSB 2014).

⁷⁵ See, e.g., EWA Comments, RM-11719, at 1-2.

spread over a larger number of channels.⁷⁶ Most commenters – generally prospective applicants for SMR channels in regions where EB/GB spectrum has not yet been made available – oppose the proposal. They argue that giving priority to incumbent operators would effectively bar new entrants, and particularly small businesses, in areas of high spectrum demand.⁷⁷ They also dispute LMCC's assumption that new entrants are less likely than incumbents to place spectrum into operation efficiently and expeditiously.⁷⁸

- 31. We propose to adopt the LMCC proposal in part. Specifically, we propose to provide a window for incumbent 800 MHz licensees in the market to acquire or expand coverage and improve their quality of service on EB B/ILT Pool channels before accepting applications from new entrants. We also propose to provide this window to Public Safety licensees that elected to remain in the Expansion Band so that they may expand coverage on their existing EB channels. Incumbent 800 MHz licensees already have deployed facilities and demonstrated a commitment to utilizing the band in a given market and are unlikely to acquire spectrum for other than operational purposes and can be expected to put additional channels into service promptly to meet existing operational needs. Moreover, although some commenters point out that a filing window for incumbent 800 MHz licensees might lessen the spectrum available to new entrants in spectrum-constrained markets, a new entrant's ability to establish a new system in a constrained market could be limited. We also note that the membership of LMCC, the proponent of this rule change, includes all of the Part 90 frequency coordinators. We tentatively agree with them that an incumbent preference would be the most effective way to distribute these EB channels among present and future B/ILT users.
- 32. LMCC suggests 6 months as a reasonable window. 82 We seek comment on whether, given the pressing need and likely prompt deployment, we should provide a shorter window, such as 3 months. We also ask commenters to address whether any limits on this priority should be imposed in order to preserve the availability of channels for new licensees. In addition, we ask commenters to address the costs and benefits of the above-described approach for facilitating 800 MHz B/ILT and Public Safety licensees' opportunities to acquire channels or expand coverage.
- 33. Although we have tentatively concluded that a window is appropriate for EB B/ILT Pool channels, we tentatively conclude that the LMCC proposal for incumbent priority is not appropriate with respect to EB SMR channels. Unlike B/ILT licensees, SMR licensees compete for customers in the commercial wireless marketplace.⁸³ Therefore, both incumbents and new licensees have similar

⁷⁶ See, e.g., UTC Comments, RM-11719, at 4.

⁷⁷ See, e.g., Charles W. West Comments, RM-11719, at 1.

⁷⁸ See, e.g., George Cushman Comments, RM-11719, at 1.

⁷⁹ See LMCC Reply Comments, RM-11719, at 4-5.

⁸⁰ See LMCC EB/GB Petition at 2-3. Some Part 90 frequency coordinators also filed separately in support of the proposal. See EWA Comments; MRFAC Comments; UTC Comments.

⁸¹ Cf. Replacement of Part 90 by Part 88 to Revise the Private Land Mobile Radio Services and Modify the Policies Governing Them, Report and Order and Further Notice of Proposed Rule Making, PR Docket No. 92-235, 10 FCC Rcd 10076, 10132-33 ¶ 126 (1995) (noting that a rule change that may reduce the number of future licensees on certain channels can nonetheless result in overall efficiency gains and improvements in the quality of service).

⁸² See LMCC EB/GB Petition at 6-7.

⁸³ See Improving Spectrum Efficiency Through Flexible Channel Spacing and Bandwidth Utilization for Economic Area-Based 800 MHz Specialized Mobile Radio Licensees, *Report and Order*, WT Docket Nos. 12-64, 11-110, 27 FCC Rcd 6489, 6494 ¶ 11 (2012); Amendment of Section 90.631 of the Commission's Rules and Regulations Concerning Loading Requirements for 900 MHz Trunked SMR Stations, *Report and Order*, PR Docket No. 92-17, 7 FCC Rcd 4914, 4916 ¶ 11 (1992).

economic motives to utilize the spectrum in a timely manner, and new entrants may have an even greater interest in deploying new or innovative services. On this basis, we do not believe that incumbents should be given priority over new entrants for these channels. We seek comment on this tentative conclusion. Commenters should explain whether incumbent priority is appropriate under these circumstances, and the related costs and benefits.

- 34. We also seek comment on whether we should provide a window for 800 MHz licensees in a market to acquire, or expand coverage on, GB channels, as well as the related costs and benefits. As noted above, GB spectrum is in the General Pool, in which eligible users include non-cellular SMR and Public Safety entities as well as B/ILT eligibles. As noted above, it is not at all clear that preferring incumbent 800 MHz SMR licensees over potential competitors would further the public interest. Commenters should address whether these concerns outweigh the benefits noted above of affording priority to incumbent B/ILT licensees, and whether those benefits apply equally to incumbent Public Safety licensees.
- 35. Finally, we seek comment on how we should implement a decision to provide a period of incumbent exclusivity for any EB/GB channels. The Commission established the procedure for making EB/GB channels available for licensing in the 800 MHz rebanding proceeding, but never codified it. We seek comment on whether the procedure should be codified (as revised in this proceeding to provide priority for incumbents), or whether we should, without any rule change, simply announce a modification to the procedure that the Commission set forth in the 800 MHz proceeding. Commenters may also suggest other means of implementing a period of incumbent exclusivity. Those supporting codification should provide suggested rule language.

III. CONCLUSION

36. The proposed rule changes discussed in this *Notice of Proposed Rulemaking* are intended to expand access to PLMR spectrum. We welcome the industry's assistance in eliminating unnecessary impediments to the most efficient use of this scarce resource.

IV. PROCEDURAL MATTERS

A. Filing Instructions

- 37. Pursuant to sections 1.415 and 1.419 of the Commission's rules, 47 C.F.R. §§ 1.415, 1.419, interested parties may file comments and reply comments on or before the dates indicated on the first page of this document. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS). *See Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).
 - Electronic Filers: Comments may be filed electronically using the Internet by accessing the ECFS: http://fjallfoss.fcc.gov/ecfs2/.
 - Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing. If more than one docket or rulemaking number appears in the caption of this proceeding, filers must submit two additional copies for each additional docket or rulemaking number.
 - Filings can be sent by hand or messenger delivery, by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
 - All hand-delivered or messenger-delivered paper filings for the Commission's Secretary must be delivered to FCC Headquarters at 445 12th St., SW, Room TW-A325, Washington, DC 20554. The filing hours are 8:00 a.m. to 7:00 p.m. All hand deliveries must be held together with rubber bands or fasteners. Any envelopes and boxes must be disposed of <u>before</u> entering the building.

- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9300 East Hampton Drive, Capitol Heights, MD 20743.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.

People with Disabilities: To request materials in accessible formats for people with disabilities (braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call the Consumer & Governmental Affairs Bureau at 202-418-0530 (voice), 202-418-0432 (tty).

B. Ex Parte Requirements

38. The proceeding this *NPRM* initiates shall be treated as a "permit-but-disclose" proceeding in accordance with the Commission's ex parte rules. 84 Persons making ex parte presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral ex parte presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the ex parte presentation was made, and (2) summarize all data presented and arguments made during the presentation. Memoranda must contain a summary of the substance of the ex parte presentation ad not merely a list of the subjects discussed. More than a one or two sentence description of the views arguments presented is generally required. If the oral presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter's written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during ex parte meetings are deemed to be written ex parte presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written ex parte presentations and memoranda summarizing oral ex parte presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (e.g., .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission's ex parte rules.

C. Paperwork Reduction Act Analysis

39. This document does not contain proposed information collection(s) subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. In addition, therefore, it does not contain any new or modified information collection burden for small business concerns with fewer than 25 employees, pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. 3506(c)(4).

D. Initial Regulatory Flexibility Analysis

40. As required by the Regulatory Flexibility Act of 1980 (RFA),⁸⁵ the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) for this *Notice of Proposed Rulemaking*, of the possible significant economic impact on small entities of the policies and rules addressed in this document. The IRFA is set forth in Appendix B. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed on or before the dates on the

^{84 47} C.F.R. §§ 1.1200 et seg.

⁸⁵ See 5 U.S.C. § 603.

first page of this *Notice of Proposed Rulemaking*. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of this *Notice of Proposed Rulemaking*, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).⁸⁶

V. ORDERING CLAUSES

- 41. Accordingly, IT IS ORDERED, that pursuant to Sections 4(i), 4(j), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 303(r), this *Notice of Proposed Rulemaking* IS HEREBY ADOPTED.
- 42. IT IS FURTHER ORDERED that, pursuant to Sections 4(i), 4(j), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 303(r), and Section 1.407 of the Commission's Rules, 47 C.F.R. § 1.407, the petition for rulemaking filed by the Land Mobile Communications Council, RM-11719, on March 27, 2014 IS GRANTED to the extent stated herein.
- 43. 40. IT IS FURTHER ORDERED that, pursuant to Sections 4(i), 4(j), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 303(r), and Section 1.407 of the Commission's Rules, 47 C.F.R. § 1.407, the petition for rulemaking filed by the Land Mobile Communications Council, RM-11722, on May 15, 2014 IS GRANTED to the extent stated herein.
- 44. IT IS FURTHER ORDERED THAT THE Commission's Consumer and Government Affairs Bureau, Reference Information Center, SHALL SEND a copy of this *Notice of Proposed Rule Making*, including the Regulatory Flexibility Certification, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch Secretary

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⁸⁶ See 5 U.S.C. § 603(a).

APPENDIX A

Proposed Rules

Chapter 1 Title 47 of the Code of Federal Regulations, Parts 1 and 90, is proposed to be amended as follows:

Part 1 – PRACTICE AND PROCEDURE

1. The authority citation for Part 1 continues to read as follows:

AUTHORITY: 15 U.S.C. 79 et seq.; 47 U.S.C. 151, 154(j), 160, 201, 225 and 303.

- 2. Section 1.931 is amended by revising paragraph (b)(11) to read as follows:
- § 1.931 Application for special temporary authority.
- * * * * *
- (b) Private Wireless Services.
- * * *
- (11) An applicant for an itinerant station license, an applicant for a new private land mobile radio station license in the frequency bands below 470 MHz or in the 806-824/851-866 MHz band, the 896-901/935-940 MHz band, or the one-way paging 929-930 MHz band (other than a commercial radio service applicant or licensee on these bands) or an applicant seeking to modify or acquire through assignment or transfer an existing station below 470 MHz or in the 806-824/851-866 MHz band, the 896-901/935-940 MHz band, or the one-way paging 929-930 MHz band may operate the proposed station during the pendency of its application for a period of up to 180 days under a conditional permit. Conditional operations may commence upon the filing of a properly completed application that complies with § 90.127 if the application, when frequency coordination is required, is accompanied by evidence of frequency coordination in accordance with § 90.175 of this chapter. Operation under such a permit is evidenced by the properly executed Form 601 with certifications that satisfy the requirements of § 90.159(b).

* * * * *

PART 90 - PRIVATE LAND MOBILE RADIO SERVICES

3. The authority citation for Part 90 continues to read as follows:

Authority: Sections 4(i), 11, 303(g), 303(r), and 332(c)(7) of the Communications Act of 1934, as amended, 47 U.S.C. 154(i), 161, 303(g), 303(r), 332(c)(7).

- 4. Section 90.35 is amended by revising paragraphs (b), (c)(2), (c)(61)(iv), and (c)(63) to read as follows:
- § 90.35 Industrial/Business Pool.
- * * * * *
- (b) * * *
- (3) Frequencies.

INDUSTRIAL/BUSINESS POOL FREQUENCY TABLE

Frequency or band	Class of station(s)	Limitations	Coordinator
* * *	* * *	* * *	* * *
153.035	do		IP

153.0425	do	30	IP
153.050	do	4, 7	IP
153.0575	do	4, 7, 30	IP
153.065	do		IP IP
153.0725	do	30	IP
153.080	do	4, 7	IP
153.0875	do		IP
153.0873		4, 7, 30	IP
153.1025	do	20. 90	IP IP
	do	30, 80	IP IP
153.110	do	4, 7	
153.1175	do	4, 7, 30	IP IP
153.125	do		IP
153.1325	do	30	IP IP
153.140	do	4, 7	IP
153.1475	do	4, 7, 30	IP
153.155	do		IP
153.1625	do	30	IP
153.170	do	4, 7	IP
153.1775	do	4, 7, 30	IP
153.185	do		IP
153.1925	do	30	IP
153.200	do	4, 7	IP
153.2075	do	4, 7, 30	IP
153.215	do		IP
153.2225	do	30	IP
153.230	do	4, 7	IP
153.2375	do	4, 7, 30	IP
153.245	do		IP
153.2525	do	30	IP
153.260	do	4, 7	IP
153.2675	do	4, 7, 30	IP
153.275	do		IP
153.2825	do	30	IP
153.290	do	4, 7	IP
153.2975	do	4, 7, 30	IP
153.305	do		IP
153.3125	do	30	IP
153.320	do	4, 7	IP
153.3275	do	4, 7, 30	IP
153.335	do		IP
153.3425	do	30	IP
153.350	do	4, 7	IP
153.3575	do	4, 7, 30	IP
153.365	do	., .,	IP
153.3725	do	30	IP
153.380	do	30	IP
153.3875		30	IP
	do	30	IP IP
153.395	do		114

153.4025	do	30	IP
153.410	do		IW
* * *	* * *	* * *	* * *
450 to 470	Fixed, base, or mobile	27, 57.	
451.00625	Base or mobile	33	
451.0125	do	33	
451.01875	do	33	IW
* * *	* * *	* * *	* * *
454.000	do	8	IP
456.00625	do	33	
456.0125	do	33	
456.01875	do	33	IW
* * *	* * *	* * *	* * *
462.53125	do	33.	
462.5375	do	2.	
462.7375	do	2.	
462.750	Base	29, 36.	
* * *	* * *	* * *	* * *
467.53125	do	33.	
467.5375	do	2.	
467.7375	do	2.	
467.74375	do	33, 62.	
* * *	* * *	* * *	* * *

(c) Explanation of assignment limitations appearing in the frequency table of paragraph (b)(3) of this section:

* * *

(2) This frequency will be assigned with an authorized bandwidth not to exceed 4 kHz.

* * *

(61) * * *

(iv) The airports and their respective reference coordinates are (coordinates are referenced to North American Datum 1983 (NAD83)):

City and airport	Reference coordinates	
	N. Latitude	W. Longitude
* * *	* * *	* * *
Jacksonville, FL:		
Craig Municipal (CRG)	30°20'10.8"	81°30'52.0"
Jacksonville Int'l (JAX)	30°29'38.6"	81°41'16.3"
Kahului, HI: Kahului (OGG)	20°53'55.4"	156°25'48.9"
Kailula-Kona, HI: Ke-Ahole (KOA)	19°43'57.3"	156°24'56.0"
Kalamazoo, MI: Kalamazoo/Battle Creek International (AZO) * * *	42°14'05.5"	85°33'07.4"
Seattle, WA:		

Boeing/King County Int'l (BFI)	47°31'48.4"	122°18'07.4"
Seattle-Tacoma Int'l (SEA)	47°26'56.3"	122°18'33.5"
* * *		

* * *

(63) Within the boundaries of the urbanized areas listed below, this frequency may be used only by persons rendering a central station commercial protection service within the service area of the radio station utilizing the frequency and may be used only for communications pertaining to safety of life and property, and for maintenance or testing of the protection facilities. Central station commercial protection service is defined as an electrical protection and supervisory service rendered to the public from and by a central station accepted and certified by one or more of the recognized rating agencies, or the Underwriters Laboratories' (UL), or Factory Mutual System. Other stations in the Industrial/Business Pool may be licensed on this frequency only when all base, mobile relay and control stations are located at least 120 km (75 miles) from the city center or centers of the specified urban areas. With respect to combination urbanized areas containing more than one city, 120 km (75 mile) separation shall be maintained from each city center which is included in the urbanized area. The locations of centers of cities are determined from appendix, page 226, of the U.S. Commerce publication "Air Line Distance Between Cities in the United States." This limitation applies to the following urbanized areas: Albany - Troy - Schenectady, NY; Allentown - Bethlehem, PA; Atlanta, GA; Birmingham, AL; Boston, MA; Bridgeport, CT; Buffalo, NY; Charlotte, NC; Chattanooga, TN; Cincinnati, OH/KY; Davenport – Rock Island - Moline, IA/IL; Dayton, OH; Denver, CO; Detroit, MI; Flint, MI; Fresno, CA; Grand Rapids, MI; Hartford, CT; Kansas City MO/KS; Los Angeles, CA; Louisville, KY; Milwaukee, WI; Minneapolis – St. Paul, MN; Mobile, AL; Nashville, TN; New Haven, CT; New Orleans, LA; New York, NY/NJ; Newport News – Hampton, VA; Norfolk – Portsmouth, VA; Oakland, CA; Philadelphia, PA/NJ; Phoenix, AZ; Portland, OR; Providence – Pawtucket, RI/MA; Richmond, VA; Rochester, NY; Sacramento, CA; San Bernardino, CA; San Francisco, CA; San Jose, CA; Shreveport, LA; South Bend, IN; Springfield, MA; Toledo, OH; Trenton, NJ/PA; Tucson, AZ; Wilmington, DE; and Worcester, MA.

* * * * *

- 5. Section 90.159 is amended by revising paragraphs (b), (b)(1), and (c) to read as follows:
- § 90.159 Temporary and conditional permits.

* * * * *

- (b) An applicant proposing to operate a new land mobile radio station or modify an existing station below 470 MHz or in the 806-824/851-866 MHz band, the 896-901/935-940 MHz band, or the one-way paging 929-930 MHz band (other than a commercial radio service applicant or licensee on these bands) that is required to submit a frequency coordination recommendation pursuant to paragraphs (b) through (h) of § 90.175 of this part may operate the proposed station during the pendency of its application for a period of up to one hundred eighty (180) days upon the filing of a properly completed formal Form 601 application that complies with § 90.127 of this part if the application is accompanied by evidence of frequency coordination in accordance with § 90.175 of this part and provided that the following conditions are satisfied:
- (1) The proposed station location is west of Line C as defined in § 90.7, and (for applicants proposing to operate below 470 MHz or in the 806-824/851-866 MHz band or the 896-901/935-940 MHz band) south of Line A as defined in § 90.7.

* * *

(c) An applicant proposing to operate an itinerant station or an applicant seeking the assignment of authorization or transfer of control for an existing station below 470 MHz or in the 806-824/851-866 MHz band, the 896-901/935-940 MHz band, or the one-way paging 929-930 MHz band (other than a commercial radio service applicant or licensee on these bands) may operate the proposed station during the pendency of its application for a period of up to one hundred eighty (180) days upon the filing of a properly completed formal Form 601 application that complies with § 90.127 of this part. Conditional authority ceases immediately if the application is dismissed by the Commission. All other categories of applications listed in § 90.175 of this part that do not require evidence of frequency coordination are excluded from the provisions of this section.

* * * * *

- 6. Section 90.219 is amended by revising paragraph (d)(3) to read as follows:
- § 90.219 Use of signal boosters.

* * * * *

- (d) Deployment rules. * * *
- (3)(i) Except as set forth in paragraph (d)(3)(ii) of this section, signal boosters must be deployed such that the radiated power of each retransmitted channel, on the forward link and on the reverse link, does not exceed 5 Watts effective radiated power (ERP).
- (ii) Railroad licensees may operate Class A signal boosters transmitting on a single channel with up to 30 Watts ERP on frequencies 452/457.90625 to 452/457.9625 MHz in areas where communications between the front and rear of trains is unsatisfactory due to distance or intervening terrain barriers.

* * * * *

- 7. Section 90.261 is amended by revising paragraph (f) to read as follows:
- § 90.261 Assignment and use of the frequencies in the band 450-470 MHz for fixed operations.

* * * * *

(f) Secondary fixed operations pursuant to paragraph (a) of this section will not be authorized on the following frequencies or on frequencies subject to § 90.267, except as provided in § 90.219(d)(3)(ii):

* * * * *

APPENDIX B

Initial Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),⁸⁷ the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in this *Notice of Proposed Rulemaking (NPRM)*. The Commission requests written public comments on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the *NPRM* indicated on the first page of this document. The Commission will send a copy of the *NPRM*, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).⁸⁸ In addition, the Commission will ensure that the *NPRM* and IRFA (or summaries thereof) will be published in the Federal Register.⁸⁹

A. Need for, and Objectives of, the Proposed Rules

2. We are issuing an *NPRM* to encourage greater use and improved spectrum efficiency of Part 90 private land mobile radio (PLMR) spectrum. We seek to implement changes to our policies and regulations that promote optimal use, innovation, and investment. Today's *NPRM* will enable the Commission to develop a record on several issues, including whether to allow 806-824/851-866 MHz (800 MHz) band incumbent licensees in a market a six-month period in which to apply for Expansion Band and Guard Band frequencies before the frequencies are made available to applicants for new systems, whether to amend Section 90.159 of our Rules to extend conditional licensing authority to applicants for site-based licenses in the 800 MHz and 896-901/935-940 MHz bands, whether to amend Section 90.35(c) of our Rules to make available for PLMR use frequencies that are on the band edge between the Industrial/Business Pool and either General Mobile Radio Service or Broadcast Auxiliary Service spectrum, whether to make certain frequencies that are designated for central station alarm operations available for other PLMR uses, and whether to amend Sections 90.219(d)(3) and 90.261(f) of our Rules to accommodate certain railroad operations.

B. Legal Basis

3. Interested parties may find authority for the actions proposed in this *NPRM* in Sections 4(i), 4(j), and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 154(i), 154(j), 303(r), as well as Section 1.407 of the Commission's Rules, 47 C.F.R. § 1.407.

C. Description and Estimate of the Number of Small Entities to Which Rules Will Apply

4. The RFA directs agencies to provide a description of, and, where feasible, an estimate of, the number of small entities that may be affected by the rules adopted herein. The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction." In addition, the term "small business" has the

⁹⁰ 5 U.S.C. § 604(a)(3).

⁸⁷ See 5 U.S.C. § 603. The RFA, see 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

⁸⁸ See 5 U.S.C. § 603(a).

⁸⁹ Id

⁹¹ 5 U.S.C. § 601(6).

same meaning as the term "small business concern" under the Small Business Act. ⁹² A "small business concern" is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration ("SBA"). ⁹³ Below, we further describe and estimate the number of small entity licensees and regulatees that may be affected by the rules changes we propose in this Fifth FNPRM.

- 5. Private Land Mobile Radio Licensees. Private land mobile radio (PLMR) systems serve an essential role in a vast range of industrial, business, land transportation, and public safety activities. These radios are used by companies of all sizes operating in all U.S. business categories. Because of the vast array of PLMR users, the Commission has not developed a small business size standard specifically applicable to PLMR users. The SBA rules, however, contain a definition for Wireless Telecommunications Carriers (except Satellite) which encompasses business entities engaged in radiotelephone communications employing no more than 1,500 persons. According to the Commission's records, there are a total of 3,374 licenses in the frequencies range 173.225 MHz to 173.375 MHz, which is the range affected by this NPRM. Despite the lack of specific information, however, the Commission believes that a substantial number of PLMR licensees may be small entities.
- 6. Frequency Coordinators. Neither the Commission nor the SBA has developed a small business size standard specifically applicable to spectrum frequency coordinators. There are nine frequency coordinators certified by the Commission to coordinate frequencies allocated for public safety use. He Commission has not developed a small business size standard specifically applicable to frequency coordinators. The SBA rules, however, contain a definition for Wireless Telecommunications Carriers (except Satellite) which encompasses business entities engaged in radiotelephone communications employing no more than 1,500 persons. Under this category and size standard, we estimate that a majority of frequency coordinators can be considered small.
- 7. Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing. The Census Bureau defines this category as follows: "This industry comprises establishments primarily engaged in manufacturing radio and television broadcast and wireless communications equipment. Examples of products made by these establishments are: transmitting and receiving antennas, cable television equipment, GPS equipment, pagers, cellular phones, mobile communications equipment, and radio and television studio and broadcasting equipment." The SBA

⁹² 5 U.S.C. § 601(3) (incorporating by reference the definition of "small-business concern" in the Small Business Act, 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

⁹³ 15 U.S.C. § 632.

⁹⁴ See 13 C.F.R. § 121.201, NAICS code 517210.

⁹⁵ This figure was derived from Commission licensing records as of August 16, 2013. Licensing numbers change on a daily basis. We do not expect this number to be significantly smaller today. This does not indicate the number of licensees, as licensees may hold multiple licenses. There is no information currently available about the number of licensees that have fewer than 1,500 employees.

⁹⁶ See http://transition.fcc.gov/pshs/public-safety-spectrum/coord.html (last visited August 28, 2013).

⁹⁷ See 13 C.F.R. § 121.201, NAICS code 517210.

⁹⁸ The NAICS Code for this service 334220. *See* 13 C.F.R. § 121.201. *See also* <a href="http://www.census.gov/cgibin/sssd/naics/

has developed a small business size standard for Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing, which is: all such firms having 750 or fewer employees. According to Census Bureau data for 2011, there were a total of 809 establishments in this category that operated for part or all of the entire year. According to Census bureau data for 2011, there were a total of 939 firms in this category that operated for the entire year. Of this total, 784 had less than 500 employees and 12 had 1000 or more employees. 99 Thus, under that size standard, the majority of firms can be considered small.

D. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements

8. The proposed rule changes discussed in this *Notice of Proposed Rulemaking* are intended to expand access to PLMR spectrum, using existing licensing mechanisms. Because this simply gives licensees new options for spectrum to use, but does not impose a new burden, licensees, frequency coordinators, and manufacturers should not incur new costs.

E. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

- 9. The RFA requires an agency to describe any significant alternatives that it has considered in developing its approach, which may include the following four alternatives (among others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small entities."
- 10. We believe that the rule changes discussed in this *Notice of Proposed Rulemaking* will promote flexibility and more efficient use of the spectrum, reduce administrative burdens on both the Commission and licensees, and allow licensees to better meet their communications needs.
 - F. Federal Rules that May Duplicate, Overlap, or Conflict with the Proposed Rules
 - 11. None.

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⁹⁹ See http://censtats.census.gov/cgi-bin/cbpnaic/cbpdetl.pl.

¹⁰⁰ 5 U.S.C. §§ 603(c)(1)-(c)(4).